E3 Installation Guide

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CHAPTER 1

Welcome to E3!

E3 is a complete system for process supervisory and control, developed for our customer's connectivity, flexibility, and reliability requirements. E3 is the result of years of Elipse's research and hard work.

Its architecture is fully focused on network operation and distributed applications, creating a true Client-Server system that offers a wide range of features allowing fast application development, high communication capability, and also ensures system expansion, which preserves user investments.

With E3, users can perform communication with hundreds of data acquisition devices, using proprietary drivers and OPC (*OLE for Process Control*). Powerful graphical user interfaces can be viewed on a single computer, on a local network, or via Internet. Other features, like alarm acknowledgment, access to most common databases on the market, information exchange among several software programs and components, and specific report and formula modules, make E3 much more powerful and versatile than any other software program available.

We appreciate your preference for our products, and we wish you success with your new work tool!

Elipse Software Team

CHAPTER 2

Package Content

Please make sure the following items are in the Elipse E3's package:

- Software license
- Installation Guide
- Protection device (hard key)

Contact an Elipse Software dealer if any of these items is missing.

CHAPTER 3

Installers

Since version 3.1, installer names have been changed, in order to contain information about installer's platform and language. The new installer name format is the following:

```
nnnn-pppp-qqq.exe
```

Where *nnnn* is the product name, *pppp* is the platform, and *qqq* is the language code, as in the following examples:

Examples of installer names

PRODUCT	PLATFORM	LANGUAGE	EXECUTABLE
E3 Full	x86 (32 bits)	Brazilian Portuguese	e3full-x86-ptb.exe
Viewer	x86 (32 bits)	English	e3viewer-x86-enu.exe
WebViewer	x86 (32 bits)	Spanish	e3webviewer-x86-esn.exe
HCS 8000 Full	x86 (32 bits)	Brazilian Portuguese	hcs8000full-x86-ptb.exe
HCS 8000 WebViewer	x86 (32 bits)	Brazilian Portuguese	hcs8000webviewer-ptb.exe

The available languages for our products are the following:

Available languages for Elipse products

LANGUAGE	CODE
Brazilian Portuguese	ptb
English	enu
German	deu
Spanish	esn
Chinese Simplified	chs
Chinese Traditional	cht

3.1 E3 Server and E3 Studio

To run E3 server or E3 programming environment, users must have a computer with the following configuration:

- A 2 GHz or faster processor
- 4 GB of RAM

- Video adapter and monitor with 1024x768 resolution
- 1 GB of hard disk free space (does not include space for data files)
- Microsoft Windows XP SP3, XP x64 SP2, Server 2003 SP2, Vista SP2, Server 2008 SP2, Server 2008 R2 SP1, Server 2012, Windows 7 SP1, or Windows 8
- USB port
- Network interface (for server or distributed applications)

3.2 Viewer

To run Viewer (client), users must have a computer and the following configuration:

- A 2 GHz or faster processor
- 2 GB of RAM
- Video adapter and monitor with 800x600 resolution
- 512 MB of hard disk free space
- Microsoft Windows XP SP3, XP x64 SP2, Server 2003 SP2, Vista SP2, Server 2008 SP2, Server 2008 R2 SP1, Server 2012, Windows 7 SP1, or Windows 8
- Network interface (for E3 Server connection)

CHAPTER 4

Installation

E3 allows two types of installation: **Full Install** or **Viewer Install** (for client stations). For more information about limitations of the **Demo** mode, check the topic **Limitations of Demonstration Mode** in the **E3 User's Manual**.

4.1 Full Install

1. Plug the protection device (*hard key*) in the computer's USB port. E3 validates licenses based on this device.
2. Open the file e3full-x86-enu.exe and follow the on-screen instructions.
3. An **Installation Complete** message appears when installation is finished. A program group named **Elipse E3** is then created on Windows **Start** menu.

NOTES:

- In case of a time-limited protection device installation, the E3 Server shows, on Windows Notification Area, messages warning how much time remains (in days, hours, and finally minutes) until program license expires
- To install E3 using a **softkey**-type protection device, please contact **Elipse Software**

4.2 Viewer Install

1. Execute the installation file e3viewer-x86-enu.exe.
2. Follow the on-screen instructions, and wait for the end of the installation.
3. An **Installation Complete** message appears when installation is successful. A program group named **Elipse E3** is then created on Windows **Start** Menu.

A protection device is not needed for Viewer installation.

4.3 WebViewer

WebViewer is a web client that allows viewing and controlling E3 applications in browsers supporting the ActiveX technology, such as Internet Explorer. Thus, it is possible to view and interact with a factory floor process via regular web browsers.

After the installation, a WebViewer works exactly as a Viewer, downloading the application.

To use a WebViewer, it is necessary to specify Server configurations, according to the procedures explained on the next sections.

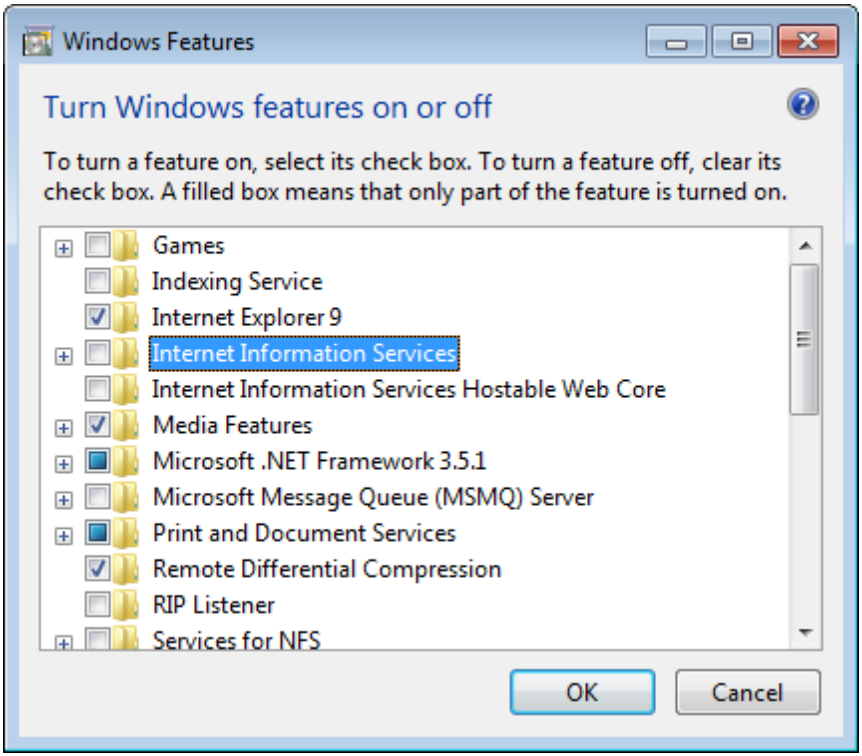
4.4 Server Configuration

In server's computer, users must install a web server in order to correctly run WebViewer's control page scripts. Any web server can be used, as long as it runs ASP (*Active Server Pages*) pages. The following procedures explain how to install IIS (*Internet Information Services*), which is a web server that comes with Windows operating system. To install IIS on Windows Server 2003 SP2 or XP SP3, follow these steps:

1. Open the **Start - Control Panel** menu.
2. Click **Add or Remove Programs**.
3. Click **Add/Remove Windows Components**.
4. Select **Internet Information Services (IIS)**, and then click **Next**.
5. Software installation then starts (to install IIS, users must have a Windows Install CD). Wait for the end of the process to perform the necessary settings.

To install IIS on Windows Vista SP2 or Windows 7 SP1, follow these steps, using an administrator account:

1. Open the **Start - Control Panel** menu.
2. Click **Programs and Features**.
3. Click **Turn Windows features On or Off**.
4. Click **Continue**.
5. Locate the **Internet Information Services (IIS)** item, and then expand it to show all its items.


Windows Features
Turn Windows features on or off
To turn a feature on, select its check box. To turn a feature off, clear its check box. A filled box means that only part of the feature is turned on.
Games
Indexing Service
Internet Explorer 9
Internet Information Services
Internet Information Services Hostable Web Core
Media Features
Microsoft .NET Framework 3.5.1
Microsoft Message Queue (MSMQ) Server
Print and Document Services
Remote Differential Compression
RIP Listener
Services for NFS
OK
Cancel

IIS installation on Windows Vista or 7

6. Select, at least, the following options, and then click **OK**.

- Web Management Tools
  - IIS Management Console
  - IIS Management Scripts and Tools
  - IIS Management Service
- World Wide Web Services
  - Application Development Features
    - ASP
    - ISAPI Extensions
    - ISAPI Filters
  - Common Http Features
    - Default Document
    - HTTP Redirection

- Static Content
- Security
  - Basic Authentication
  - Request Filtering

7. Software installation then starts (users must have a Windows Install CD). Wait for the end of the process to perform the necessary settings.

4.4.1 IIS Configuration with E3 Server on the Same Machine

Along with E3 installation, users will find files e3web.asp, e3web2.asp, docwrite.asp, docwrite2.asp, and e3downloader.cab (located in the directory where E3 was installed, in Web folder). These files must be placed in the directory C:\InetPub\wwwroot, which is created during IIS installation. Apart from these files, users must also place WebViewer's installer package (e3webviewer-x86-enu.exe) in the same directory. This installer is used when a client station accesses a server for the first time, in case E3 had not been previously installed on it. This file can be obtained at Elipse's **website**.

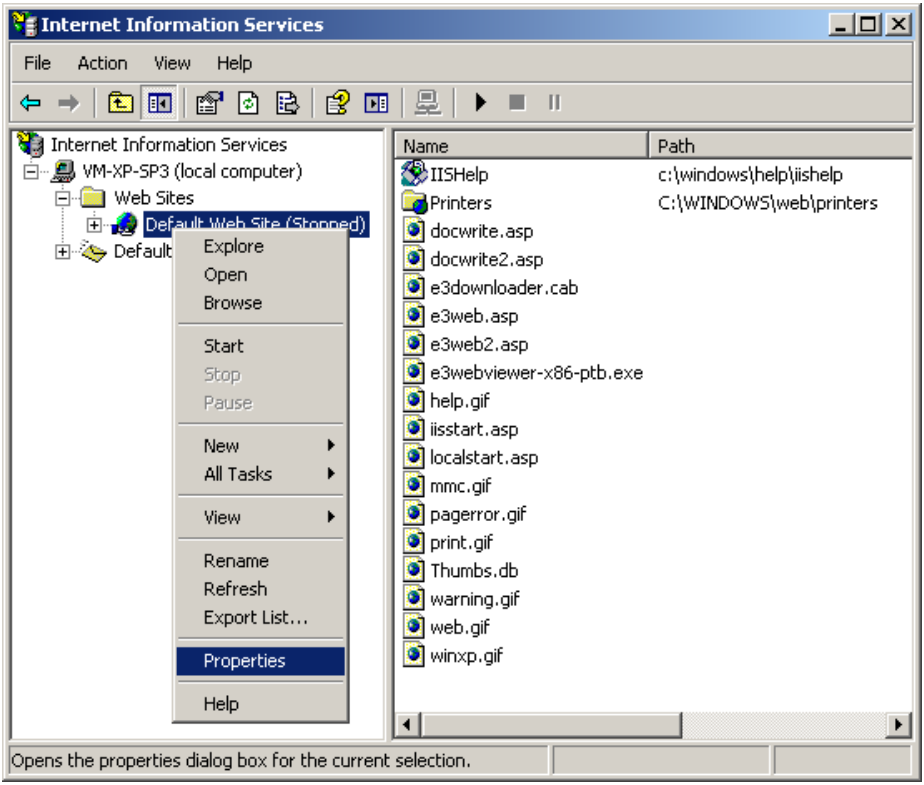
NOTE: The file e3webviewer-x86-enu.exe must match the running E3 Server's version (and build). Users must update all files in IIS directory if they update E3 Server's version.

After copying these files to folder C:\InetPub\wwwroot, then users can start configuring IIS.

4.4.1.1 Windows Server 2003 and XP

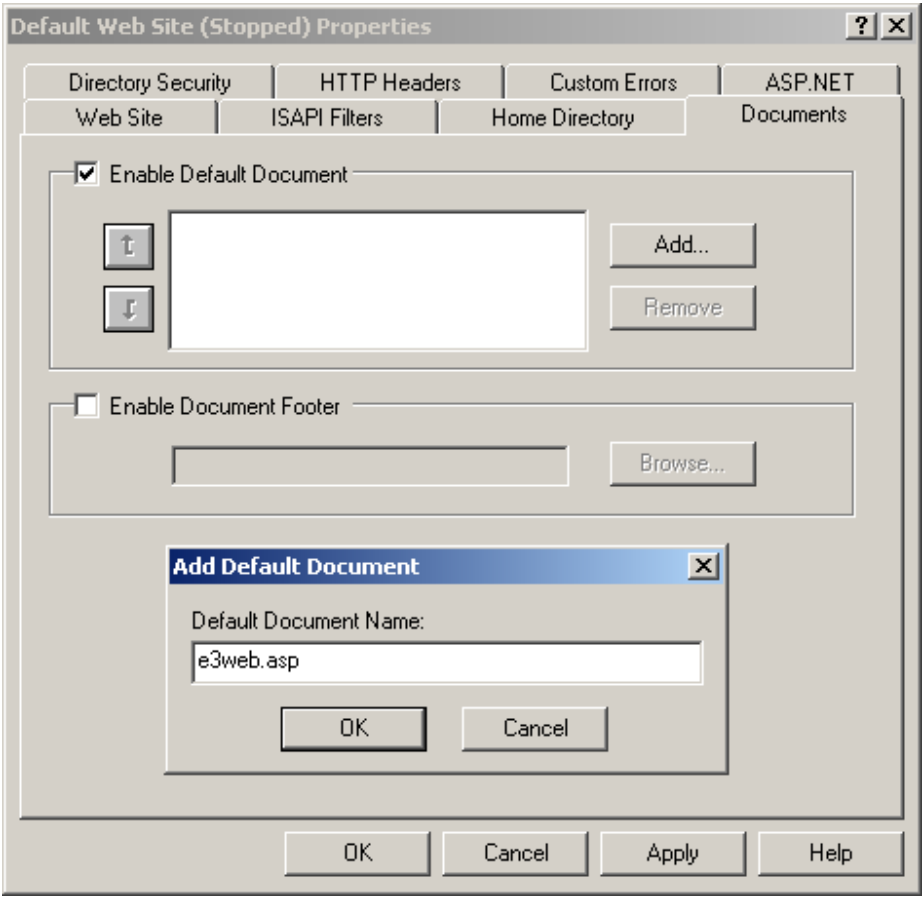
On Windows Server 2003 SP2 and XP SP3, follow these procedures:

1. Go to the **Start - Control Panel - Administrative Tools** menu.
2. Click **Internet Information Services** on Windows XP SP3, or click **Internet Services Manager** on Windows Server 2003 SP2.
3. Right-click the **Default Web Site** item, and then choose the **Properties** item.



Opening Virtual Directory properties

4. Go to the **Documents** tab. Click **Remove** to exclude all documents from the **Enable Default Document** section. Click **Add** and type "e3web.asp" in the **Default Document Name** field to insert this document as the default page.

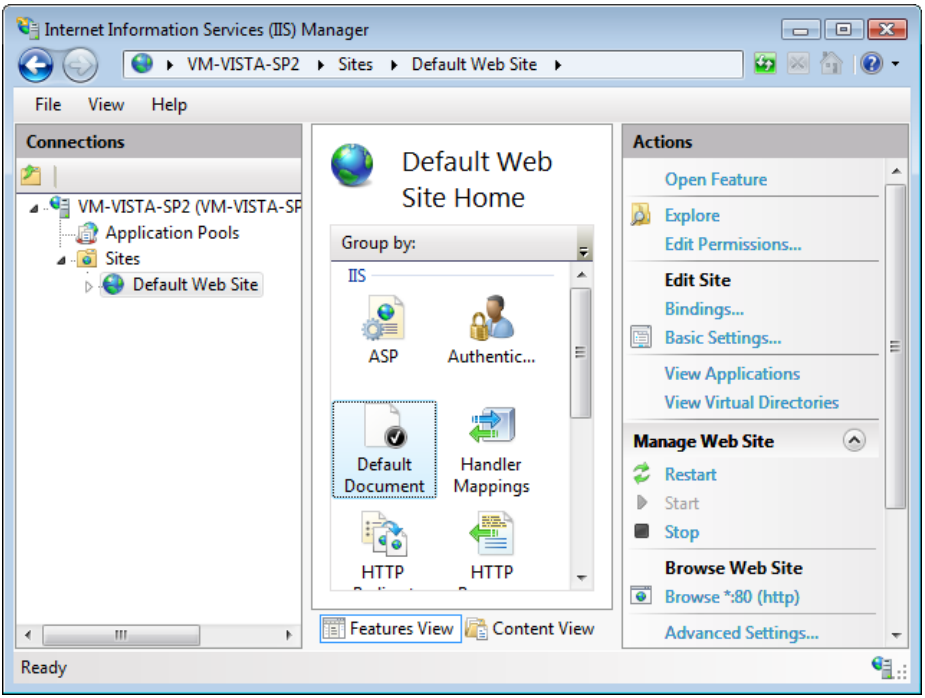


Adding a default document

4.4.1.2 Windows Vista

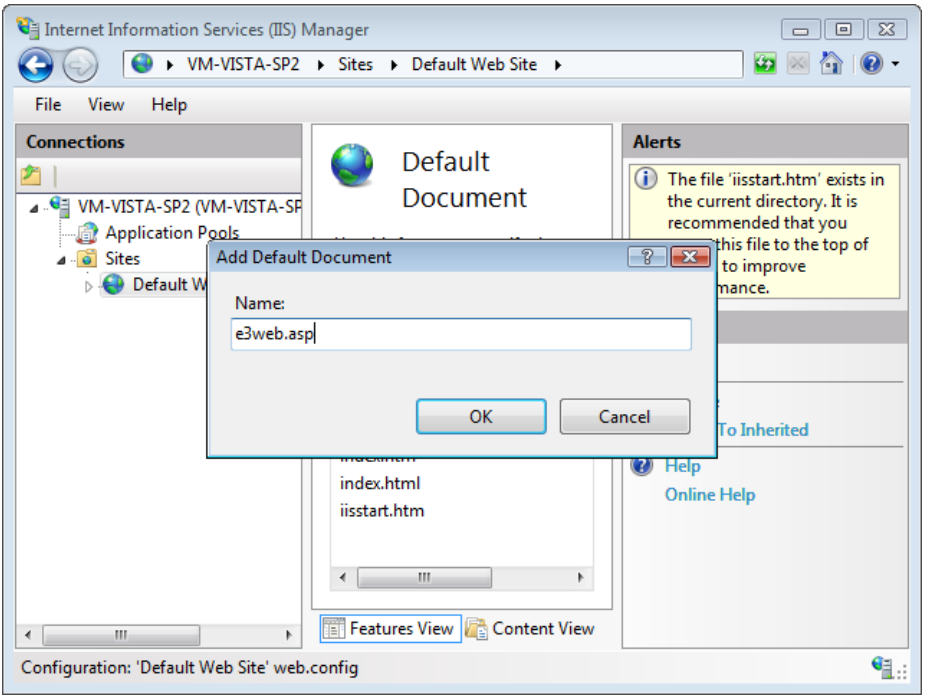
On Windows Vista SP2 (IIS version 7), follow these steps:

1. Go to the **Start - Control Panel - Administrative Tools** menu.
2. Click **Internet Information Services (IIS) Manager**, and then click **Continue**.
3. Right-click the **Default Web Site** item, and then double-click the **Default Document** option, inside the central frame.



IIS configuration

4. Click the **Add** option on **Actions** panel, type "e3web.asp" in the **Name** field, and then click **OK**.



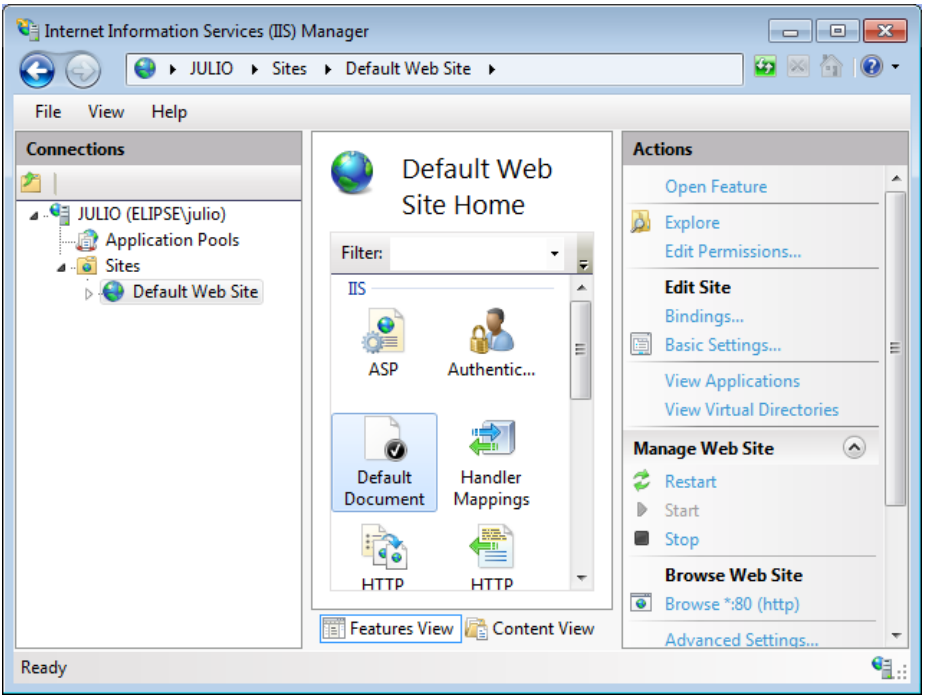
Settings for default document

5. After these procedures, the client station is then capable of accessing the web server via Internet Explorer.

4.4.1.3 Windows 7

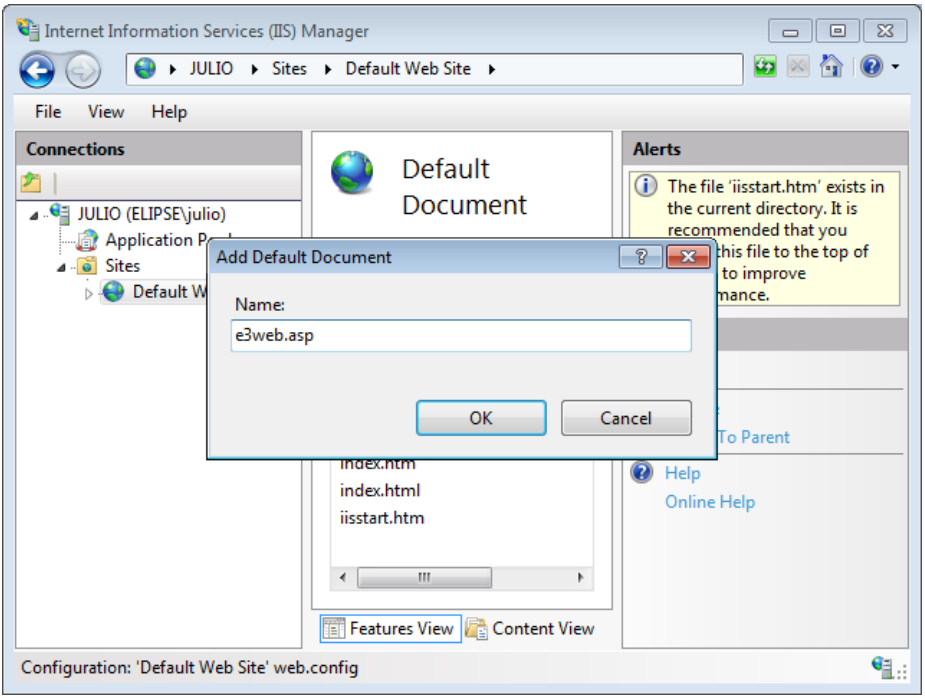
On Windows 7 SP1, follow these procedures:

1. Go to the **Start - Control Panel - Administrative Tools** menu.
2. Click **Internet Information Services (IIS) Manager**.
3. Right-click the **Default Web Site** item, and then double-click the **Default Document** option, inside the central frame.



Default document configuration

4. Click the **Add** option on **Actions** panel, type "e3web.asp" in the **Name** field, and then click **OK**.



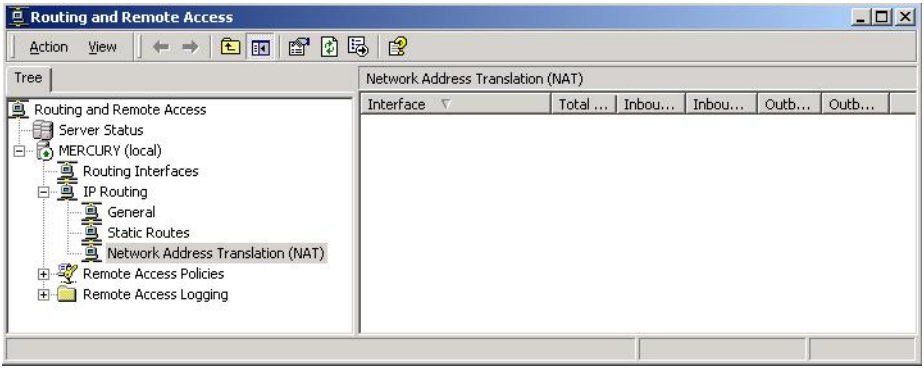
Adding a default document

5. After these procedures, the client station is then capable of accessing the web server via Internet Explorer.

4.4.2 IIS Configuration with E3 Server on a Different Server

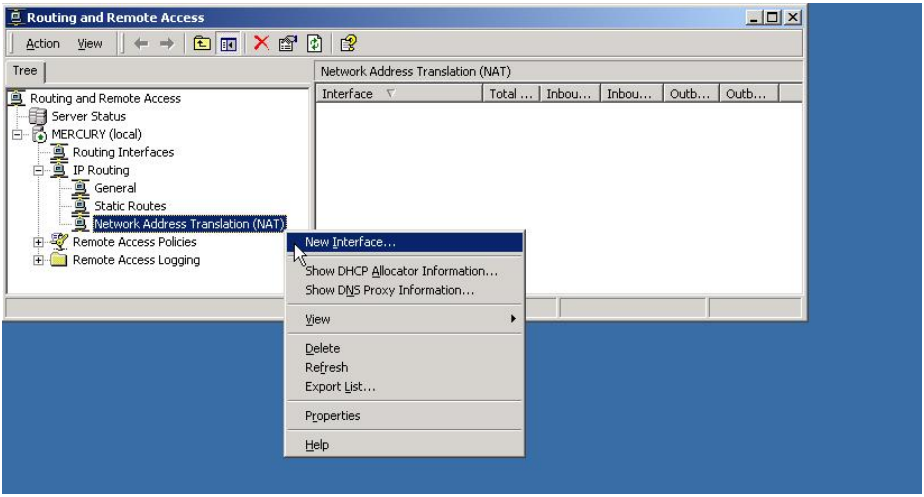
For this type of setup, users must use Windows Server 2003 SP2, because only this operating system has the **Routing and Remote Access** tool. Follow these steps to configure it:

1. Go to the **Start - Control Panel - Administrative Tools** menu, and then choose **Routing and Remote Access**.
2. On the list of IIS servers, expand the sub-items of the chosen server, and then select the **Network Address Translation** option.



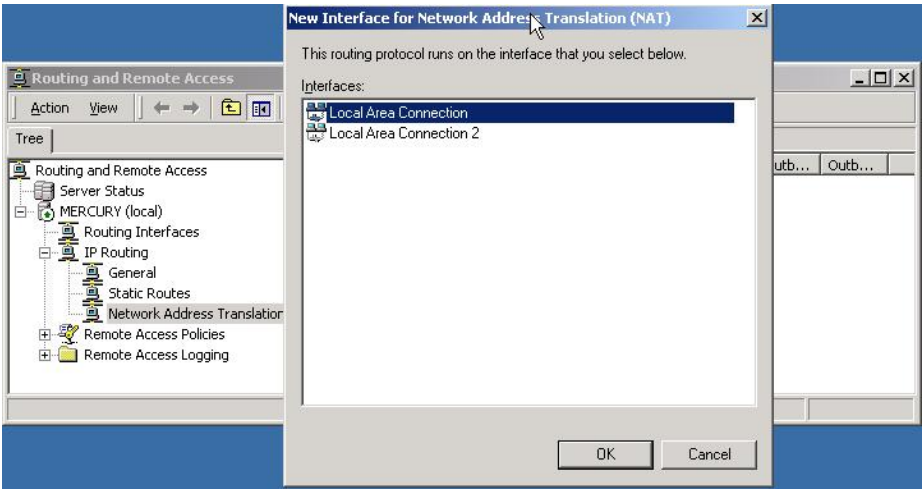
NAT setup

3. Right-click it, and then choose **New Interface**.



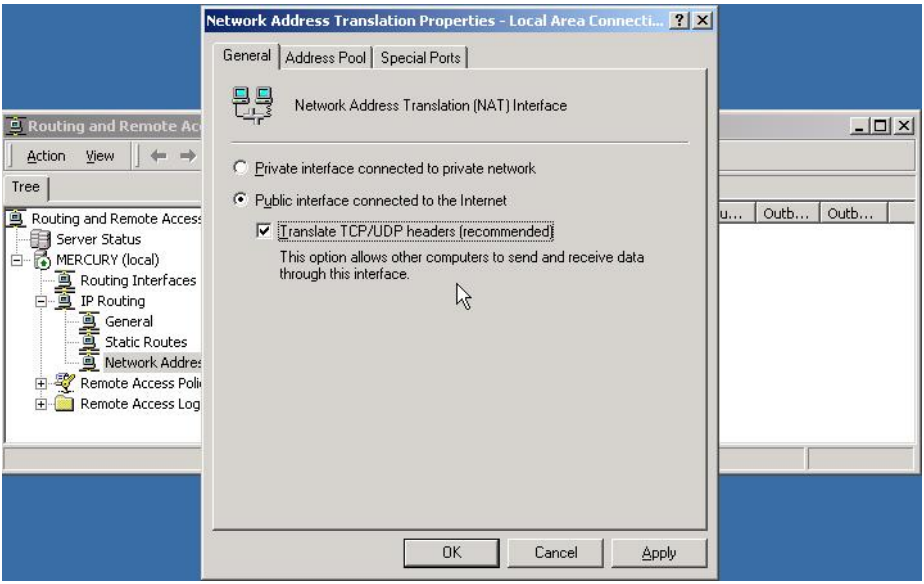
Defining a new interface

4. Select the interface exposing E3 Server on the Internet. Notice that this is not the interface connecting the server to an intranet. Click **OK**.



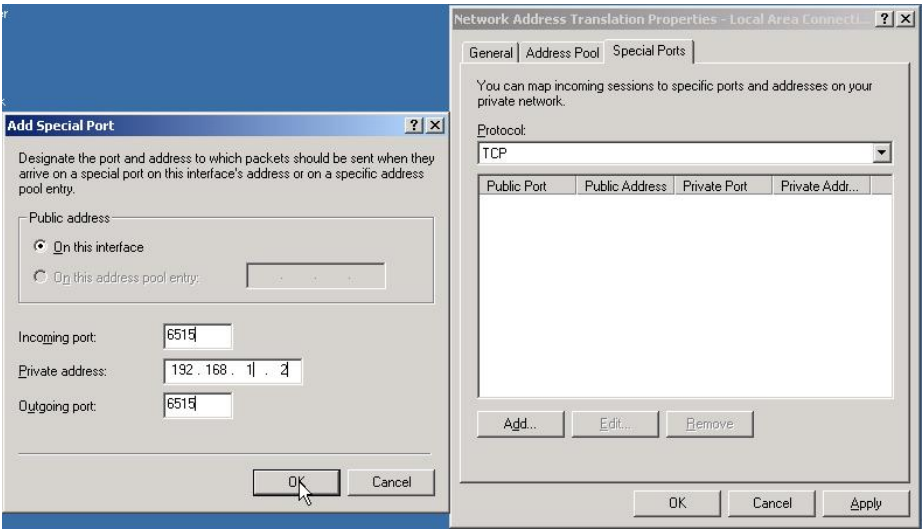
Selecting a NAT interface

5. Choose the **Public interface connected to the Internet** option, and then select the **Translate TCP/UDP headers** option.


Network Address Translation Properties - Local Area Connecti...
General
Address Pool
Special Ports
Network Address Translation (NAT) Interface
Private interface connected to private network
Public interface connected to the Internet
Translate TCP/UDP headers (recommended)
This option allows other computers to send and receive data through this interface.
OK
Cancel
Apply

Set interface as public

6. Go to the **Special Ports** tab, and then click **Add**. Fill in the **Incoming port** and **Outgoing port** fields with port number 6515, which is the default port used by E3 to communicate. In the **Private address** field, type the server's IP number.



Defining which network computer becomes public

7. Now users must change the file docwrite2.asp. Open this file (which is published in IIS virtual directory) in Notepad, and then change the following line:

```
var domain = getDomain();
```

To

```
var domain = "IIS Server's external IP";
```

The file docwrite2.asp now should look like this:

```
function getDomain() {
  // document.location.host returns server and port.
  // This function returns document name, without port.
  return document.location.host.split(':')[0];
}
function writeApplet() {
  var content = "<object classid='clsid:7EB4D157-FACC-45BB-
9536-C14B9DCE3CA7'";
  content += " width='100%' height='100%'>";
  var domain = getDomain();
  // if domain is on a different server, it must be set below
  // domain = "myserver";
  content += "<PARAM NAME='Domain' VALUE='" + domain + "'>";
  content += "<PARAM NAME='Screen' VALUE=''>";
  content += "<PARAM NAME='CachePath' VALUE=''>";
  content += "<PARAM NAME='Ping' VALUE='0'>";
  content += "<PARAM NAME='StartReadOnly' VALUE='0'>";
  content += "</object>";
  document.write(content);
```

```
}
writeApplet();
```

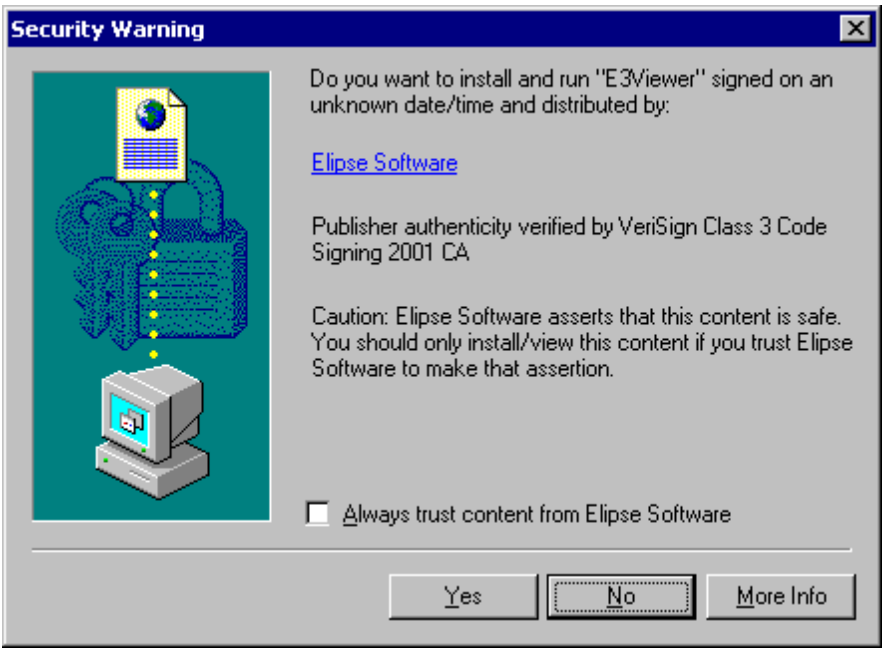
4.4.2.1 E3 Server Configuration

This configuration is the same as the one described in **IIS Configuration with E3 Server on the Same Machine**. After this operation, servers are configured and ready to be accessed.

4.5 Viewing on Client Application

If the server is using a web server, such as IIS, just type server's address or IP on browser's address bar (for example, *http://servername/virtual_directory* or *http://192.0.0.21/virtual_directory*).

During server's first access, the browser will start installing components, in case they had not been previously installed, as seen at the beginning of this chapter. This component is signed by Elipse Software, and users must accept the installation to start the necessary configurations.


Security Warning
Do you want to install and run "E3Viewer" signed on an unknown date/time and distributed by:
Elipse Software
Publisher authenticity verified by VeriSign Class 3 Code Signing 2001 CA
Caution: Elipse Software asserts that this content is safe. You should only install/view this content if you trust Elipse Software to make that assertion.
Always trust content from Elipse Software
Yes
No
More Info

WebViewer Installation

After installation, the WebViewer will be opened in the browser, and viewing server's application. Next time it will not be necessary to install the components, and connection will be faster.

NOTE: Client's version must match server's version. For this, the installer file (e3webviewer-x86-enu.exe) on server must always be the most updated version.

CHAPTER 5

Version Update

Periodically, Elipse releases new software versions, which contain new tools or updates. Such updates can be downloaded at *www.elipse.com.br*. There are also demo versions available. To get these updates, follow these steps:

1. *Download* it at Elipse's website.
2. Follow the on-screen procedures and wait them to finish. If there is already an Elipse E3 version installed, installer then asks to remove the older one. The message **Installation completed** appears if the process is successful. A program group named **Elipse E3** is then created on the computer.

CHAPTER 6

Help and Support

Elipse Software has many ways to provide product support. The first step is to check the documentation, which includes Online Help, User's Guide, and the Internet (*www.elipse.com.br*), where users can download new product versions, and also the Elipse Knowledgebase (*kb.elipse.com.br*), containing articles about Drivers, E3, Elipse Power, SCADA, etc. If the documentation does not answer the questions, users can contact our product support at *support@elipse.com.br*.

6.1 Troubleshooting Guide

Here are some steps that may help users to isolate a problem before calling technical support.

6.1.1 Revise Product Documentation

This is one of the most productive ways to find answers to user questions. Users can check the following documentation:

- **E3 Release Notes**: This document contains late-breaking information about new features. It is located at E3's installation directory
- **Manuals**: Users can find information about E3 tools and resources at both **E3 User's Manual** and **Scripts Reference Manual**. These manuals are electronically available in CHM format, and in printed format with **Master** and **Studio** software packages
- **VBScript Language Reference**: Official Microsoft documentation for VBScript language. Users can also find this resource by clicking **Documentation / VBScript Reference Guide** icon at **Start / All Programs / Elipse Software / Elipse E3** program group
- **Microsoft Forms Visual Basic Reference**: Official Microsoft documentation for MSForms objects. Users can also find this resource by clicking **Documentation / MSForms Reference Guide** icon at **Start / All Programs / Elipse Software / Elipse E3** program group

6.1.2 Reproduce the Problem

Reproducing the problem is the first step to solve it. Once users can reproduce a problem, they can start finding solutions for it. The following questions may give users more insight into the problem:

Does this problem occur with only one application?

Users may want to try another application to see if they can reproduce the problem. If they cannot reproduce it with other applications, think about what is specific about this application.

Does this problem occur with only one machine?

If it does, it may be related to the system configuration. Try using a different video driver, or even modifying the system configuration to see if this problem persists. It is advisable to have a machine with configurations not much different from the average.

Which E3 version is in use?

Users can check the software version by opening the item **About E3 Studio** on **Help** menu. Applications generated in older versions are fully compatible with recent ones; however, applications generated in recent versions cannot be edited or executed in older versions.

Under which circumstances does this problem occur?

Does the amount of available memory affect this problem?

How about other programs running on the system?

Is there enough disk space available?

6.1.3 Isolate the Problem

After checking under which circumstances the problem occurs, users will be able to isolate it. Once the problem is isolated, it is much easier and quicker to find solutions for it.

Try isolating the component causing the problem. Users can use information about under which circumstances it happened to help isolate it. If the problem occurs with a script, users may want to create a smaller example. If it is too large, try splitting it, and then executing it, step by step.

6.2 Frequently Asked Questions

During installation, the following message appears: "The following applications should be closed before continuing the install"

POSSIBLE REASON

Another E3 version is installed and opened while trying to install this new version.

SOLUTION

Close the older version first, and then continue the installation by clicking **Retry**.

During installation, the following message appears: "Files in use. Files that need to be updated are in use"

POSSIBLE REASON

An Elipse SCADA version is installed and opened while trying to install Elipse E3.

SOLUTION

Close Elipse SCADA and continue E3 installation by clicking **Retry**.

After installation, the following message appears when I try to run the software: "E3 Studio license not found in this server. Do you want to run in demonstration mode?"

POSSIBLE REASON

There are two possible reasons:

a) Protection device or detection drivers are not correctly installed.

b) USB port setup is not correct or the port is damaged.

SOLUTION

For each reason, try the following:

a) Run HaspDinst.exe application with **-I** option. This can be done via **Run** option on Windows **Start** menu. The command line is:

```
C:\Program Files\Elipse Software\Elipse E3\HASP\haspdinst.exe -I
```

b) Test USB port with another known device (for example, a printer). Check setup for port configuration.

For more information about E3's **Demo** mode limitations, see topic **Limitations of Demonstration Mode** in **E3 User's Manual**.

I moved the application to another computer and now it does not display images anymore

POSSIBLE REASON

The picture's file path is incomplete or incorrect.

SOLUTION

Create the same directory structure (the same path) as the original computer.

6.3 Technical Support

The following sections describe the technical support services available.

6.3.1 E-mail

- **Headquarters**: *suporte@elipse.com.br*
- **USA**: *info@elipse-software.com*
- **Taiwan**: *evan@elipse.com.br*

6.3.2 Internet

Get the latest news and software versions at *www.elipse.com.br*.

Search for technical articles and support at *kb.elipse.com.br*.

6.3.3 Telephone

Phone support is available weekdays. When calling, users must have their computer nearby, and running E3. Users must also have all available documentation, along with information listed below:

- Running software version
- License number
- Hardware configuration (CPU, memory, network, etc.)
- Operating system (Windows Server 2003, XP, etc.)
- Error messages, if any
- Name, company, and telephone or fax number
- A brief description about the problem and its circumstances
- A brief description about the attempts to solve the problem

Call the following numbers:

- **Headquarters**: +55 (51) 3346-4699
- **EUA**: +1 (252) 995-6885
- **Taiwan**: +886 (7) 323-8468

Headquarters
Rua 24 de Outubro, 353 - 10º andar
90510-002 Porto Alegre RS
Phone: +55 (51) 3346-4699
Fax: +55 (51) 3222-6226
E-mail: elipse@elipse.com.br

USA
2501 Blue Ridge Road, Suite 250
Raleigh - NC - 27607 USA
Phone: +1 (252) 995-6885
Fax: +1 (252) 995-5686
E-mail: info@elipse-software.com

Taiwan
9F., No.12, Beiping 2nd St., Sanmin Dist.
807 Kaohsiung City - Taiwan
Phone: +886 (7) 323-8468
Fax: +886 (7) 323-9656
E-mail: evan@elipse.com.br

Check our website for information about a representative in your city or country.

www.elipse.com.br

kb.elipse.com.br

elipse@elipse.com.br

Microsoft Partner
Gold Independent Software Vendor (ISV)

OPC FOUNDATION MEMBER